

Tessellation 9 (B)

Suite: Tessellation Party!

by Arya Akhavan (October 2012)

Angles for R.I. = 1.540

112 + 21 girdles = 133 facets

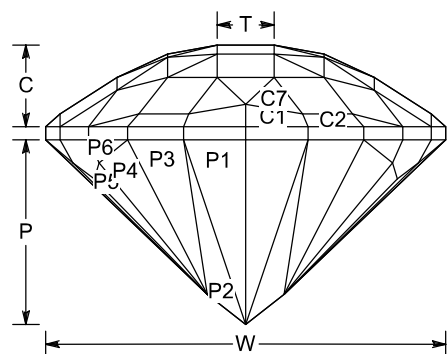
3-fold, mirror-image symmetry

96 index

L/W = 1.013 T/W = 0.142 U/W = 0.123

P/W = 0.461 C/W = 0.203

Vol./W³ = 0.237



PAVILION

P1	42.17°	03-29-35-61-67-93	Cut to centerpoint.
P2	42.00°	05-27-37-59-69-91	Meet at culet.
G1	90.00°	03-29-35-61-67-93	Set stone size.
G2	90.00°	08-24-40-56-72-88	Meet P1, P2, G1
P5	42.96°	11-21-43-53-75-85	Meet P2, P3, P4
P3	43.67°	08-24-40-56-72-88	Level girdle.
P4	43.75°	09-23-41-55-73-87	Meet P2, P3
P6	59.28°	12-20-44-52-76-84	Level girdle.
P7	59.63°	16-48-80	Level girdle.
G4	90.00°	16-48-80	Meet P4, P5, G3
G3	90.00°	12-20-44-52-76-84	Meet G2, P3, P4

CROWN

C2	41.31°	08-24-40-56-72-88	Level girdle.
C1	41.26°	03-29-35-61-67-93	Set girdle width.
C3	39.95°	12-20-44-52-76-84	Level girdle.
C4	36.41°	16-48-80	Level girdle.
C5	34.00°	13-19-45-51-77-83	Meet G3, G4, C3, C4
C6	32.56°	08-24-40-56-72-88	Meet C2, C3, C5
C7	33.48°	04-28-36-60-68-92	Meet C1, C2, C6
C8	28.36°	96-32-64	Meet C1, C7
C9	29.53°	14-18-46-50-78-82	Meet C4, C5
C10	24.85°	08-24-40-56-72-88	Meet C5, C6, C9; C6, C7, C8
C11	21.88°	96-32-64	Meet C6, C7, C8, C10
C12	23.50°	10-22-42-54-74-86	Meet C5, C6, C9, C10
C13	12.36°	12-20-44-52-76-84	Meet C9, C12; C10, C11, C12
C14	8.81°	96-32-64	Meet C10, C11, C12, C13
T	0.00°	Table	Meet C13, C14

This is a substantial rework of the previous iteration of this design, which had nearly uncuttable small facets required to establish the crown. This design, on the other hand, is still fairly easy while using my interesting "keel and curtain" triangular concept in the pavilion. Works extraordinarily well in all materials from quartz to rutile (RI = 1.54 - 2.62), and when finished in higher RIs looks way more complicated than it actually is!

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